

This Listing of Claims will replace all prior versions, and listings, of claims in the application.

In the claims:

1. (Currently amended.) A method of treating, ameliorating, preventing, or protecting from an intestinal damage, said intestinal damage comprising a morphological damage, comprising administering a pharmaceutically active formulation of PYY or a PYY agonist to a human to treat, alleviate, or prevent the intestinal damage, wherein said PYY agonist is a peptide that comprises an active fragment of PYY, wherein said active fragment comprises amino acids 22-28 of the amino acid sequence set out in SEQ ID NO:2.

2. (Previously presented.) The method of claim 1 wherein the intestinal damage is associated with a condition selected from the group consisting of inflammatory bowel disease, bowel atrophy, loss of bowel mucosa, and loss of bowel mucosal function.

3. (Previously presented.) The method of claim 2 wherein the inflammatory bowel disease is ulcerative colitis.

4. (Canceled.)

5. (Previously presented.) The method of claim 1 wherein the intestinal damage is caused by an event selected from the group consisting of exposure to cytotoxic agents, radiation, toxicity, infection and an injury.

6. (Previously presented.) The method of claim 1, wherein the PYY or the PYY agonist is used in conjunction with a cytotoxic agent or radiation.

7. (Withdrawn.) The method of claim 1 further comprising administering a growth hormone.

8. (Previously presented.) The method of claim 1 further comprising administering an

anti-inflammatory agent.

9. (Previously presented.) The method of claim 8 wherein the anti-inflammatory agent is selected from the group consisting of tacrolimus, mycophenolate mofetil, anti-tumor necrosis factor antibody, interleukin-10, interleukin-11, anti-interleukin-12 antibody, anti-interleukin-1 antibody, anti-alpha4 integrin antibody, and nicotine.

10. (Previously presented.) The method of claim 1 wherein the PYY or the PYY agonist is administered by a route selected from the group consisting of intravenous, intraperitoneal, subcutaneous, intramuscular, oral, rectal, topical, transmucosal, nasal, or pulmonary inhalation.

11. (Previously presented.) The method of claim 1 wherein the PYY or the PYY agonist is administered in the amount of about 100 μ g to 500 mg/day.

12. (Previously presented.) The method of claim 1 wherein the PYY or the PYY agonist is administered in the amount of about 500 μ g to 100 mg/day.

13. (Canceled.)

14. (Previously presented.) The method of claim 1 wherein the PYY agonist is PYY[3-36].

15. (Withdrawn.) A probiotic bacterium comprising a nucleic acid encoding PYY or a PYY agonist.

16. (Withdrawn.) The probiotic bacterium of claim 15 wherein the bacteria expresses and secretes the PYY or the PYY agonist.

17. (Withdrawn.) The probiotic bacterium of claim 15 wherein the bacterium is a lactobacillus bacterium.

18. (Withdrawn.) The probiotic bacterium of claim 15 wherein the PYY agonist is PYY[3-36].

19. (Withdrawn.) A method of treating a bowel condition comprising administering the probiotic bacterium of claim 15 to a patient.

20. (Withdrawn.) The method of claim 19 wherein the probiotic bacterium is administered by oral ingestion or suppository.

21. (Withdrawn.) The method of claim 19 wherein the bowel condition comprises intestinal damage.

22. (New.) The method according to claim 1, wherein said active fragment comprises amino acids 22-36 of the amino acid sequence set out in SEQ ID NO:2.

23. (New.) The method according to claim 1, wherein said active fragment comprises amino acids 16-36 of the amino acid sequence set out in SEQ ID NO:2.

24. (New.) The method according to claim 1, wherein said active fragment comprises amino acids 13-36 of the amino acid sequence set out in SEQ ID NO:2.

25. (New.) The method according to claim 1, wherein said active fragment comprises amino acids 11-36 of the amino acid sequence set out in SEQ ID NO:2.

26. (New.) The method according to claim 1, wherein said active fragment comprises amino acids 6-36 of the amino acid sequence set out in SEQ ID NO:2.

27. (New.) The method according to claim 1, wherein said active fragment comprises an amino acid sequence as set out in SEQ ID NO:2, wherein said fragment comprises a deletion of

about 5 amino acids from the N-terminus of said amino acid as set out in SEQ ID NO:2.

28. (New.) The method according to claim 1, wherein said active fragment comprises an amino acid sequence as set out in SEQ ID NO:2, wherein said fragment comprises a deletion of about 10 amino acids from the N-terminus of said amino acid as set out in SEQ ID NO:2.

29. (New) The method according to claim 1, wherein said active fragment comprises an amino acid sequence as set out in SEQ ID NO:2, wherein said fragment comprises a deletion of about 15 amino acids from the N-terminus of said amino acid as set out in SEQ ID NO:2.

30. (New) The method according to claim 1, wherein said morphological damage comprises one or more of the following: localized hyperemia with no ulcers; linear ulcers with no inflammation; linear ulcer with inflammation; two or more sites of ulceration or inflammation; two or more sites of ulceration and inflammation; two or more sites of inflammation and ulceration; and one major site of inflammation and ulceration extending at greater than 1 centimeter along the length of the colon.

31. (New) The method according to claim 1, wherein said morphological damage comprises colon edema.

32. (New) The method according to claim 30, wherein said morphological damage further comprises colon edema.